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EXAMINER

NGUYEN, BRIAN D

ART UNIT

PAPER NUMBER

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Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4, 9-10, 12, 17-18, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shinbashi et al (5,796,717) in view of Kanekar et al (6,751,191).

a) Regarding to Claim 9: Shinbashi disclosed an apparatus for preventing information losses due to network node failure, the apparatus comprising:

a primary node (see Fig. 4A : block 1-1, working unit);

at least one backup node operatively connected to the primary node (see Fig. 4A; blocks 3-1 and 3-2, stand-by unit);

means for receiving ingress traffic in the primary node from a first endpoint (see Fig. 6: blocks Mux/Demux (means for receiving ingress traffic), and block SW on the top-left of the figure (a first endpoint));

means for replicating the ingress traffic to the at least one backup node (see Fig. 4A: connection from Input line of the primary node to the input of block 4a);

means for outputting primary egress traffic from the primary node (Fig.6: blocks Mux/Demux and Output line);

means for outputting backup egress traffic from the at least one backup node (see Fig. 6: Mux/Demux of the Stand-By Unit block);

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determining means operatively connected to the primary node and the at least one backup node for determining whether the primary node has failed (see Fig. 6: blocks Control unit (on the common Stand-by Unit) and Sub-CPU (on one-by-one of the working units nodes and stand-by units); and see col.5 lines 19-35: failure detection signals);

means for transmitting the primary egress traffic from the primary node to a second endpoint if the determining means determine that the primary node has not failed (see Fig. 6: blocks SW and blocks Mux/Demux of the working unit); and

means for transmitting the backup egress traffic from a selected one of the at least one backup nodes to the second endpoint if the determining means determine that the primary node has failed (see Fig. 6: blocks SW and blocks Mux/Demux of the stand-by unit).

Shinbashi failed to explicitly disclosed synchronizing means operatively connected to the primary node and the backup node for synchronizing the at least one backup node and the primary node.

Kanekar explicitly disclosed such synchronizing means operatively connected to the primary node (master 202 in figure 3) and the backup node (slave 204) for synchronizing the at least one backup node and the primary node (see 1102 in figure 11A).

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such synchronizing means operatively connected to the primary node and the backup node for synchronizing the at least one backup node and the primary node, as taught by Kanekar with Shinbashi in order to reduce the switchover time upon failure of the primary node.

b) Regarding to Claim 10: Shinbashi disclosed all aspects of this claim as set forth in claim 9.

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Shinbashi failed to explicitly disclose the primary node and the at least one backup node are network routers.

Kanekar explicitly disclosed such primary node and at least one backup node are network routers (see col. 2, lines 13-17).

At the time of the invention, it would be obvious to a person of ordinary skill in the art to use routers in place of the primary node and at least one backup node as taught by Kanekar in the system of Shinbashi in order to reduce the switchover time upon failure of the primary router.

c) Regarding to Claim 12: Shinbashi disclosed all aspects of this claim as set forth in claim 9.

Shinbashi failed to explicitly disclosed means for transmitting synchronization information from the primary node to the at least one backup node.

Kanekar clearly disclosed such means for transmitting synchronization information from the primary node to the at least one backup node (see 1102 in figure 11A).

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such means for transmitting synchronization information from the primary node to the at least one backup node, as taught by Kanekar in the system of Shinbashi in order to reduce the switchover time upon failure of the primary node.

d) Regarding to Claim 24: Shinbashi disclosed all aspects of this claim as set forth in claim 9.

Shinbashi failed to explicitly disclose the means for replicating the ingress traffic to the at least one backup node comprises means for simultaneously passing a copy of the ingress traffic to the at least one backup node.

Kanekar explicitly disclosed such means for simultaneously passing a copy of the ingress traffic to the at least one backup node (see col. 2, lines 13-24 where Kanekar teaches that the slave router obtains information from the shared set of interfaces, see also shared interfaces 206 in figure 3).

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such means for simultaneously passing a copy of the ingress traffic to the at least one backup node, as taught by Kanekar in the system of Shinbashi so that communications packets can be properly routed throughout both primary and backup nodes in order to reduce the switchover time upon failure of the primary node.

e) Regarding to Claims 1, 2, 4, and 23: These claims are rejected for the same reasons as claims 9, 10, 12, and 24, respectively because the apparatus in claims 9, 10, 12, and 24 can be used to practice the method steps of claims 1, 2, 4, and 23.

f) Regarding to Claims 17, and 18: the claimed subject matters of these claims are similar to that of claims 1 and 4, respectively. Therefore, the rejection to the claims 1 and 4 would apply to reject the article of manufacture of these claims as well.

g) Regarding to Claim 22: Shinbashi disclosed all aspects of this claim as set forth in claim 1.

Shinbashi failed to explicitly disclose a computer data signal embodied in a carrier wave readable by a computing system and encoding a computer program of instructions for executing a computer process for preventing information losses due to network failure. Kanekar explicitly disclosed such a computer data signal embodied in a carrier wave readable by a computing system and encoding a computer program of instructions for executing a computer process for

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preventing information losses due to network failure (see col. 2, lines 49-52 where Kanekar teaches the use of a computer program of instructions (software)).

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such a computer data signal embodied in a carrier wave readable by a computing system and encoding a computer program of instructions for executing a computer process for preventing information losses due to network failure as taught by Kanekar in the system of Shinbashi in order to reduce cost and easily update when needed.

3. Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shinbashi et al (5,796,717) in view of Kanekar et al. (6,751,191) as applied to claims 9 and 1 above, and further in view of Adams, Jr. et al (5,444,782).

a) Regarding to Claim 11: Shinbashi disclosed all aspects of this claim as set forth in claim 9.

Shinbashi failed to explicitly disclose the primary node and the at least one backup node are security engines for receiving encrypted ingress traffic and outputting decrypted egress traffic.

Adams explicitly disclosed such encrypted/decrypted ingress/egress engines (see col.3 Lines 46-59: hardware for encrypting and decrypting data).

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such security engines for receiving encrypted ingress traffic and outputting decrypted egress traffic, as taught by Adams in the system of Shinbashi, in order to secure communication between computer systems connected to an open network.

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b) Regarding to Claim 3: This claim is rejected for the same reasons as claim 11 because the apparatus in claim 11 can be used to practice the method steps of claim 3.

4. Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shinbashi et al in view of Kanekar as applied to claims 1, 9, and 17 above, and further in view of Koodli (6,608,841).

Regarding claims 25-27, Shinbashi in view of Kanekar does not disclose the ingress and egress traffic comprises session context information. However, transmitting session context information in communication is well known in the art. Koodli discloses transporting the session context information (see col. 2, lines 27-31). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transmit the session context information as taught by Koodli in the system of Shinbashi in order to maintain synchronization and detect packet loss.

Allowable Subject Matter

5. Claims 5-8, 13-16, and 19-21 are objected to as being dependent upon a rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claims 1-4, 9-12, 17-18, and 22-27 have been considered but are moot in view of the new ground(s) of rejection. The finality of the rejection of the last Office action is withdrawn. The applicant argued that Albert does not teach

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“synchronizing means connected to the primary node and the backup node for **synchronizing** the at least one **backup node** and the **primary node**. This limitation is now clearly taught by Kaneka.

Conclusion

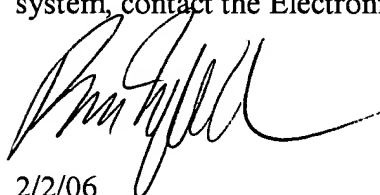
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Izawa et al (5,153,578) teaches a method and an apparatus in which the master and slave routers are synchronized with each other.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D. Nguyen whose telephone number is (571) 272-3084.

The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



2/2/06

BRIAN NGUYEN
PRIMARY EXAMINER